

QUARTERLY SUMMARY

OF THE

IMPROVEMENTS AND DISCOVERIES

IN THE

MEDICAL SCIENCES.

ANATOMY AND PHYSIOLOGY.

1. *Phenomena of Hybridity in the Human Genus.*—Broca has by careful researches been led to the view that the various races of man are different species of the same genus. He exposes as inconclusive the principal arguments adduced in favour of the unity theory, and dwells especially on the incorrectness of the assertion generally made by the defenders of this theory with regard to the phenomena of hybridity in the various races of man, and in various species of animals belonging to the same genus. It has been set forth as the most irrefutable proof of the unity of the human species, that hybrid productions of two different races of man are perfectly able to propagate themselves, while hybrid procreations of two species of animals of the same genus are said to be unable to do so; Broca, however, shows, 1st, that some of the hybrid productions from different races of man, possess only a limited power of propagation; and, secondly, that some hybrid species of animals, as those from the crossing of the dog and the wolf, the goat and the sheep, the dromedary and the camel, the hare and the rabbit, are perfectly able to propagate their species.—*Brown-Séguard's Journ. de Phys.*, vol. iii. 1860.

2. *Progress of Growth According to Age.*—Prof. QUETELET has established from his calculations the following positions as regards the inhabitants of Brussels: 1. The most rapid period of growth commences immediately after birth, the infant increasing about two decimètres in the space of a year. 2. The proportionate increase of growth then diminishes as age increases, until towards the fourth and fifth year, when the child attains its maximum of probable life. Thus, during the second year, the amount of growth is only one-half of that of the first, and during the third year about a third. 3. From the fourth to fifth year, the increase becomes pretty regular until towards the sixteenth year, *i. e.*, until after the period of puberty, the annual increase being about fifty-six millimètres. 4. After the age of puberty the growth continues to increase, though only feebly. Thus, from sixteen to seventeen years it increases four centimètres, and in the two following years two and a-half centimètres. 5. The total growth of man does not seem completely terminated at the age of twenty-five. M. Quetelet also found that the height of the inhabitants of the town exceeded that of the peasantry.—*Med. Times and Gaz.*, Jan. 4, 1862, from *L'Union Méd.*, No. 148.

MATERIA MEDICA AND PHARMACY.

3. *Tannin as a Substitute for Peruvian Bark.*—Dr. LERICHE, formerly attached to the dispensaries of the city of Lyons, recently published an interesting No. LXXXVI.—APRIL 1862. 33

memoir on the antiperiodic virtues of tannin. This essay is well worthy of attention, and has been honoured with a prize by the Society of Medical Sciences of Brussels; the author accounts for the former failures of tannin in the treatment of periodic affections, by the insufficiency and minuteness of the doses prescribed by Dr. Chaussarel. In the experiments instituted in 1840, by this gentleman, tannin was exhibited in gradually increasing doses from ten to forty-five grains in six ounces of fluid, to be taken in tablespoonfuls every three hours during the apyretic interval. Now, M. Leriche considers that this dose is utterly insufficient suddenly to check the paroxysm with any degree of certainty, and cures the fever only when persevered in for a very long time. Hence the treatment becomes quite as expensive as if quinine had been resorted to, and the only advantage of the use of tannin, economy, is sacrificed.

In ague, whatever be the type of the fever, M. Leriche recommends the medicine to be given at the outset in doses of twenty to thirty grains, according to the degree of intensity of the disease, and to be taken three hours before the paroxysm. Two or three doses are usually sufficient to effect a cure, and it may be necessary to exhibit as much as one drachm or a drachm and a quarter at once. If the fever should not yield, fifteen grains only should be given in a mixture to be taken in tablespoonfuls every hour. M. Leriche has never seen this remedy fail in its effects. He has administered tannin in 144 cases, 10 of which were still under treatment when his work was sent to press; 154 patients had been entirely cured, and two of these were men who had recently returned from Algiers with the African fever.

The following are some of M. Leriche's most usual prescriptions: *Mixture*.—Aq. destil. 4 oz.; Aq. flor. aurant. 1 dr.; Acidi tannici, 15 gr. ad 1½ dr.; Syrupi, 1 oz. F. s. a.

To be taken in tablespoonfuls hourly, or in two doses a couple of hours before the paroxysm.

Powders.—Acidi tannici, 1 dr.; *Divide in chartulas* 8. Each powder to be taken in a wafer, in jelly, or dissolved in half a glass of sugar and water.

Syrup.—Syrupi, 16 oz.; Aq. flor. aurant. 2 oz.; Acidi tannici, 2 dr. F. s. a. Every ounce of this syrup contains about eight grains of tannin.

Enema.—Decocti hordei, 6 oz.; Acidi tannici, ½ dr.; Vin. opii, 8 min. F. s. a. The addition of laudanum increases the chances of this enema being longer retained.—*Dublin Med. Press*, Jan. 22, 1862, from *Journ. de Méd.*

4. *Anarcotine*.—In the *Indian Annals of Medicine*, for Sept. 1861, there is an elaborate and able report addressed by Dr. A. Garden, of Ghazepore, to the Deputy Inspector-General of Hospitals, on the therapeutic uses of anarcotine, tabulating in various forms the results of its employment in nearly 700 cases of intermittent fevers. Turning to our systems and dispensaries, we find it briefly noticed that this substance has been employed as an antiperiodic by Dr. Roots and Dr. O'Shaughnessy. This brief notice has, it appears, been wholly overlooked or neglected in this country; and yet, as we shall show, anarcotine possesses therapeutic properties well worthy of attention.

It is generally known, that one of the crystalline constituents of opium received from chemists the name of "narcotine," under an erroneous impression that it was the narcotic principle of that drug. So far from this being the case, it has not the slightest claim to that title; and, consequently, it is very properly proposed to prefix the privative letter *a* to the name, and henceforth designate it as *anarcotine*.

Referring to Sir W. O'Shaughnessy's original statement, we find him saying:—

"I have now employed the narcotine in sixteen cases of remittent fever, and such is my opinion of the efficacy of the remedy, that in instances of fever, intermittent and remittent, in ordinary healthy subjects, and in whom there is no complication of severe organic disease, I give it with the full expectation of arresting the next periodic return of the fever. I have seen the result follow in ten of the cases of the fever alluded to. I consider narcotine a more powerful antiperiodic than quinine. The remedy does not act silently. I have observed a degree of general heat follow its use in the first instance, and subse-